SP20xxC SERIES

Schottky Barrier Rectifiers

ITO-220AB

Primary Characteristics		
I_F	20	A
V_{RRM}	20~200	V
I_{FSM}	150	A
I_F=10A @ V_F	0.55, 0.75, 0.85, 0.92	V
T_J max	125, 150	°C

Features

- Guard Ring for Over Voltage Protection
- High Forward Surge Capability
- High Frequency Operation

Mechanical Data

- Case：ITO-220AB
- Case Material：Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals：Matte Tin Finish Annealed Over Copper Lead frame. Solderable per MIL-STD-202

Ordering Information

Part No.	Remark	Package	Packing
SP20xxC	RoHS Compliant	ITO-220AB	50 / Tube
SP20xxC-H	Halogen Free		

Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	SP20 20C	SP20 30C	SP20 40C	SP20 45C	SP20 50C	SP20 60C	SP20 80C	SP20 100C	SP20 150C	SP20 200C	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current (Total) (Per Leg)	I_F	20 10										A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	150										A
Maximum Instantaneous Forward Voltage IF=10A @ 25°C	V_F	0.55				0.75		0.85		0.92		V
Maximum DC Reverse Current @ T_J=25°C at Rated DC Blocking Voltage @ T_J=100°C	I_R	0.5 30						0.2 10				mA
Typical Junction Capacitance (NOTE1)	C_J	440				355		245		175	140	pF
Typical Thermal Resistance	$R_{\theta JC}$	3										°C/W
Operating Temperature Range	T_J	-55 to +125						-55 to +150				°C
Storage Temperature Range	T_{STG}	-55 to +150										°C
Marking Code		SP20 20C	SP20 30C	SP20 40C	SP20 45C	SP20 50C	SP20 60C	SP20 80C	SP20 100C	SP20 150C	SP20 200C	

NOTES：

1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

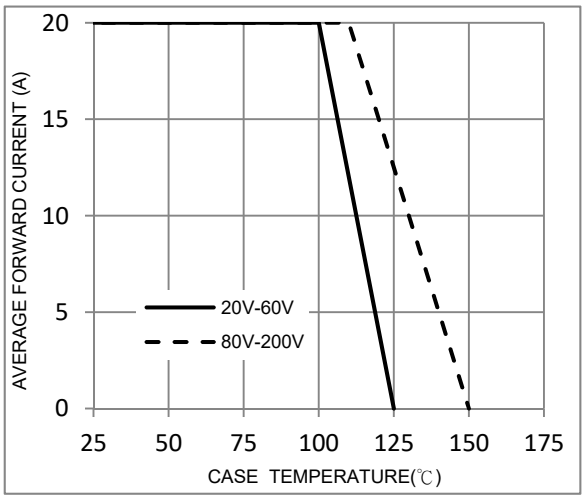


FIG. 2-Typical Forward Characteristics

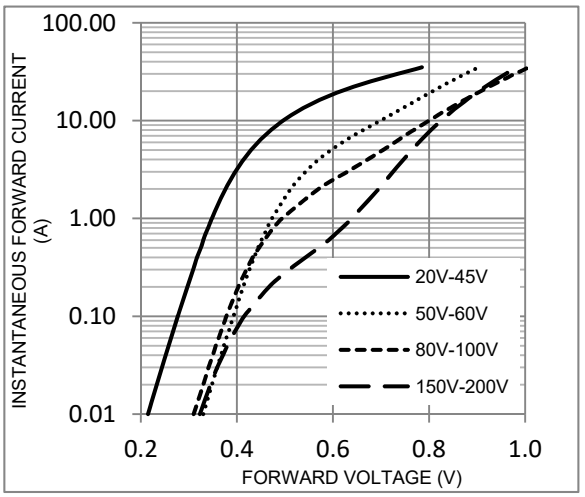


FIG. 3-Maximum Non-Repetitive Forward Surge Current

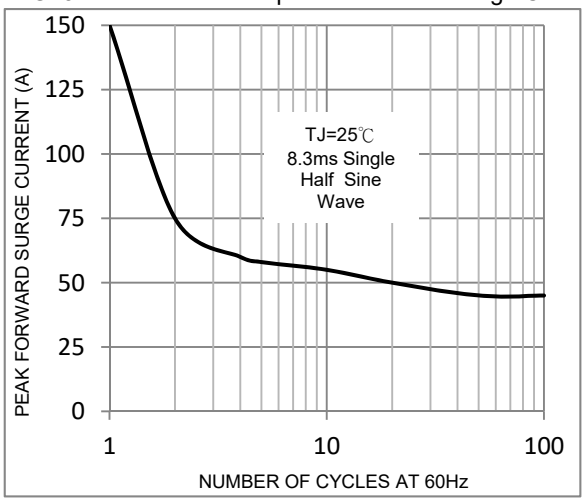


FIG. 4-Typical Reverse Characteristics

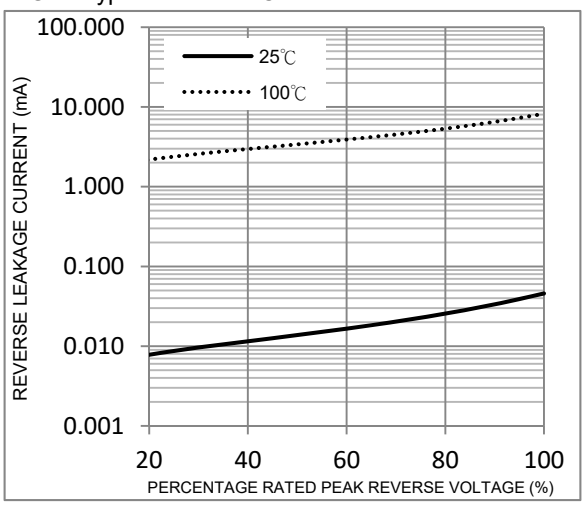
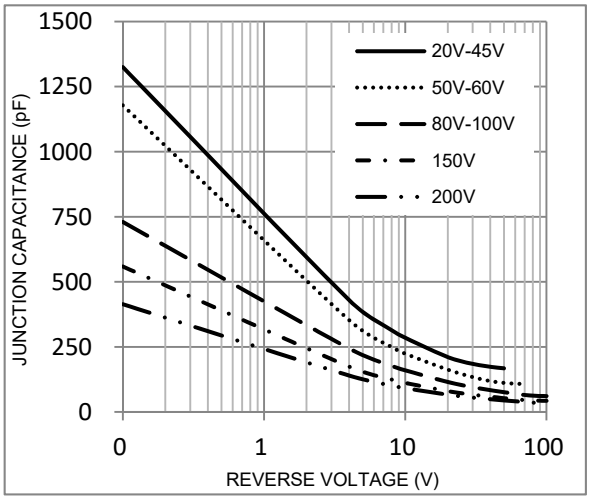
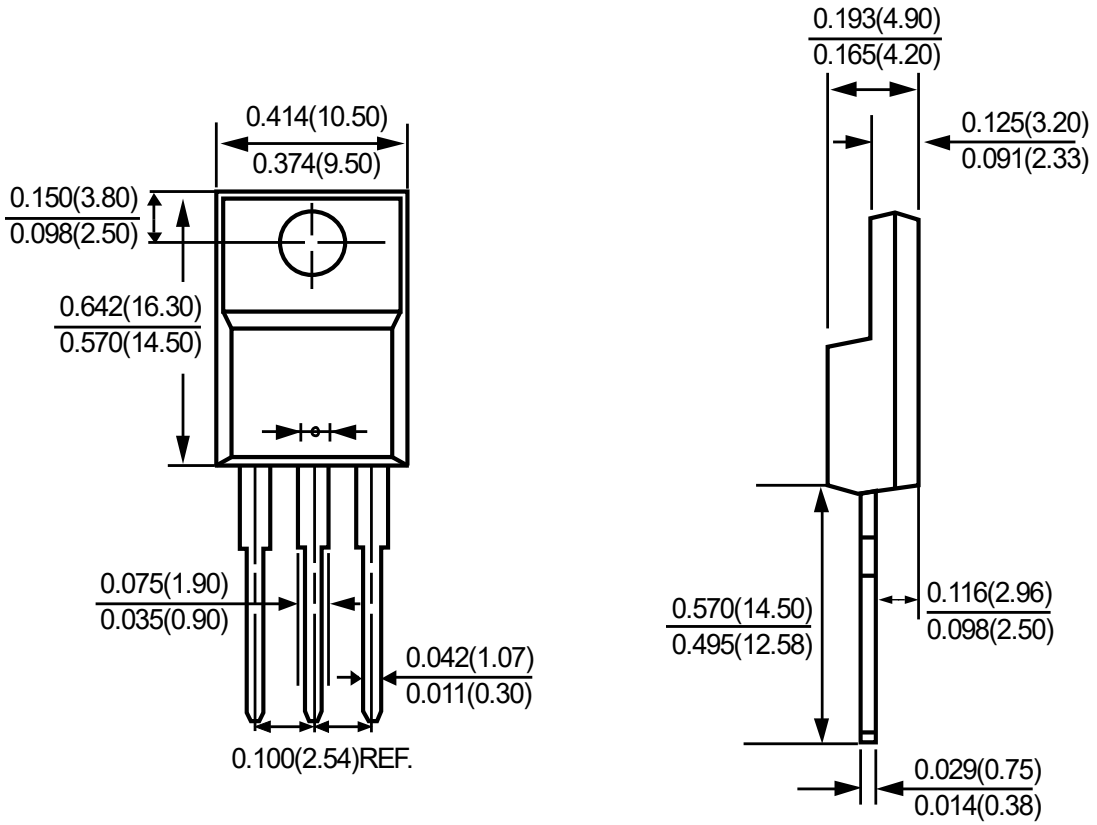


FIG. 5-Typical Junction Capacitance



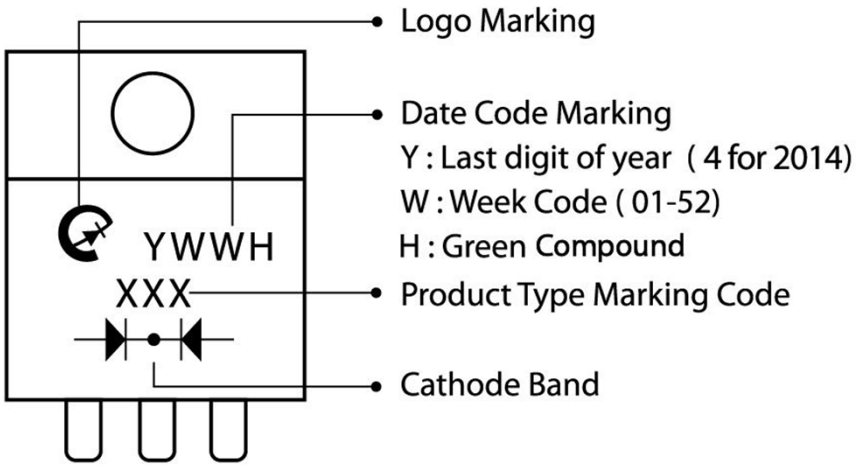
Package Outline Dimensions



ITO-220AB

Dimensions in inches and (millimeters)

Marking Information



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